Kansas Department of Health and Environment

KANSAS | Chronic Disease Risk Reduction

Highlights of Chronic Disease Risk Reduction Work

State Fiscal Year 2013

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Kansas Department of Health and Environment

Robert Moser, MD
State Health Officer and KDHE Secretary

Paula F. Clayton, MS, RD, LD
Director, Bureau of Health Promotion, KDHE

Prepared by:

Bureau of Health Promotion, Kansas Department of Health and Environment

CDRR Outreach Staff:

Jamie Bremen
Jena Chacko
Erin Fletcher
Holly Frye
Travis Rickford

Trevor Christensen, Epidemiologist
Jennifer Church
Carol Cramer
Laurie Harrison
Anthony Randles

Contact Information:

For additional information, please contact the Bureau of Health Promotion, Suite 230, Kansas Department of Health and Environment, 1000 SW Jackson, Topeka, KS 66612, call (785) 291-3742, email tupp@kdheks.gov or visit www.kdheks.gov/bhp.

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Introduction

At the turn of the 20th century, the major causes of death and disease were markedly different from today. Today the challenges from infectious diseases such as tuberculosis, diarrhea and similarly transmitted diseases have been far surpassed by chronic diseases such as diabetes, heart disease and stroke, and cancer.

- More than 1.7 million Americans die of a chronic disease each year. [i]
- Each year 7 out of 10 deaths among Americans are from chronic diseases. Heart disease, cancer and stroke account for more than 50% of all deaths each year.[ii]
- About one-fourth of people with chronic conditions have one or more daily activity limitations.[iii]

Almost every family is adversely affected by chronic diseases in one way or another: the death of a loved one; family members with life-long illness, disability or compromised quality of life; or the huge personal, community and state financial burden wrought by these diseases.

When we measure our nation's health, not just by the length of life, but by the quality of that life, we cannot ignore the urgency of chronic disease. Health care costs in the U.S. neared $2.6 trillion in 2010. Taken in its entirety, chronic diseases account for more than 75 percent of the nation's health care costs. Based on these national estimates, $19.5 billion were spent on chronic diseases in Kansas in 2010. For a concise, comprehensive review of the burden of chronic disease and behavioral risk factors in Kansas, see the Kansas Chronic Disease State Plan (2013-2017).[iv]

As a nation, we have emphasized expensive cures for disease rather than cost-effective prevention of disease. At the heart of our system has been the traditional physician patient interaction. Alone, these traditional systems no longer meet our changing health care needs. Individual health is impacted by the many independent health decisions people make and the environment in which people live.

The Chronic Disease Risk Reduction grants program directly supports communities in addressing the realization that:

- 75% of our health care costs relate to chronic diseases and much of that cost is preventable;
- Tobacco use is the number one cause of preventable death in Kansas;
- Obesity is a key contributor to chronic disease and lifestyle habits that contribute to obesity begin in childhood;
- The environments that surround us support or inhibit healthy active lifestyles; and
- 1 in 3 children born today may develop diabetes.

Purpose

The purpose of the Chronic Disease Risk Reduction (CDRR) community grant program is to provide funding and technical assistance to public health practitioners and their public and private and cross-sector partners in Kansas communities to reduce chronic disease risk through evidence-based strategies that impact tobacco use, physical activity and nutrition. The CDRR grant program is operated by the Kansas Department of Health and Environment (KDHE), Bureau of Health Promotion. This report is intended to summarize and highlight CDRR work across Kansas during the 2013 state fiscal year (July 1, 2012 – June 30, 2013).

The grant program is structured to support community progress through five phases: planning, capacity building, implementation, sustainability and maintenance. Each phase of the program requires the grantee to demonstrate increasingly comprehensive activities before advancing to the next phase. The outcomes CDRR grantees work to improve come from CDC's *Key Outcome Indicators for Evaluating Comprehensive Tobacco Control Programs* (CDC, 2005) and CDC´s *Recommended Community Strategies and Measurements to Prevent Obesity in the United States: Implementation and Measurement Guide* (MMWR, 2009).

Program Theory of Change

Policy, Systems and Environmental Approaches

It is generally accepted in the public health field that to achieve behavior change in individuals interventions should a) be multifaceted to achieve synergy through a variety of complementary approaches and b) avoid brief, one-time events, which are generally ineffective. CDRR programming emphasizes policy, systems and environmental (PSE) approaches to chronic disease primary prevention because they are evidence-based and inherently sustainable, long-term strategies. One example is the implementation of a tobacco-free university policy combined. with a university-wide media campaign educating students and staff on the health risks associated with smoking and directing them to the state Quitline. A written policy, even if not initially enforced, has a tendency to persist and influence an organization and people long after it is written. The systematic integration of an intervention into daily office operations such as the revision of a doctor's office form or some other concrete modification tends to generate output long after the revision is introduced. Environmental changes, such as trail development, park beautification and comprehensive networks of sidewalks are sustainable over the long-term.

CDRR treats PSE as a generalizable approach or criteria that can be applied to any public health intervention. Through the PSE lens, questions are asked that can ultimately improve the reach, sustainability and effectiveness of any evidence-based public health intervention:

- How can we institutionalize this intervention?
- How can we improve the sustainable implementation of this intervention?
- Whose buy-in do we need to make this intervention permanent?
- How can we extend the reach and impact of this intervention beyond the funding period?

Theory of Change

Through state grant administration, training, risk behavior surveillance, Kansas Tobacco Quitline maintenance, technical assistance and programmatic guidance, local grant recipients develop functional community coalitions, implement community assessments and leverage community resources to plan, implement and evaluate evidence-based PSE changes that reduce the risk of chronic disease. Local evidence-based PSE strategies are complemented by local and state communication activities aimed at increasing awareness and knowledge of chronic diseases and their contributing factors. The combination of increased awareness and knowledge of chronic disease factors and locally supported PSE strategies results in behavior changes that:

1. Reduce tobacco use initiation,
2. Reduce secondhand smoke exposure,
3. Reduce the number of adults and youth who use tobacco,
4. Improve nutrition and
5. Increase physical activity.

If these efforts are funded and supported at levels that allow sufficient reach, intensity and duration, shifts in these behavioral outcomes will ultimately result in reduced morbidity and mortality due to chronic disease in years to come.

There is a common misunderstanding in the general public about what constitutes a reasonable timeline for public health interventions. Chronic disease interventions, in particular, have a very long lag time between program implementation and the manifestation of improved health outcomes. There is, for instance, a well-documented lag time of 20 years between smoking prevalence and lung cancer mortality.[v] This means that if we reduce and maintain a significant reduction in the percent of Kansans who smoke cigarettes today, we would not see reduced lung cancer mortality for two decades. It is because of this timeline that CDRR must actively communicate realistic program success in a format that is digestible by the general public whenever possible. This, in turn, will contribute to program recognition, support and sustainability.

Funding support

In state fiscal year 2013, a combination of special revenue funds and federal grant money totaling $1,273,188 was provided to local grantees. CDRR grantees are required

to leverage resources through collaborative private, public partnerships to maximize outcomes. All grantees provided the required minimum 25 percent in-kind match, and many exceeded this amount. Dedicating additional staff time is often the preferred method to meet the requirement, however grantees also demonstrate match by contributing materials, volunteer time and leveraging support from other funding sources. As a result, grantees across the state leveraged $524,044 in matched funding during fiscal year 2013.

KDHE also invests significant time and resources that is targeted to county-level staff coordinating CDRR grants. For example, in fiscal year 2013 there were approximately:

- ✓ 40 filled data requests including county-specific Quitline registration counts for certain time periods or subpopulations, Youth Tobacco Survey (YTS) estimates and Behavioral Risk Factor Surveillance System (BRFSS) estimates
- ✓ 240 instances of 1-on-1 program evaluation technical assistance by state program staff
- ✓ 82 instances of 1-on-1 communications technical assistance
- ✓ 6 webinars on programming opportunities
- ✓ 1 statewide summit with 88 participants representing 49 counties
- ✓ More than 130 completed requests for assistance with communications

Overview

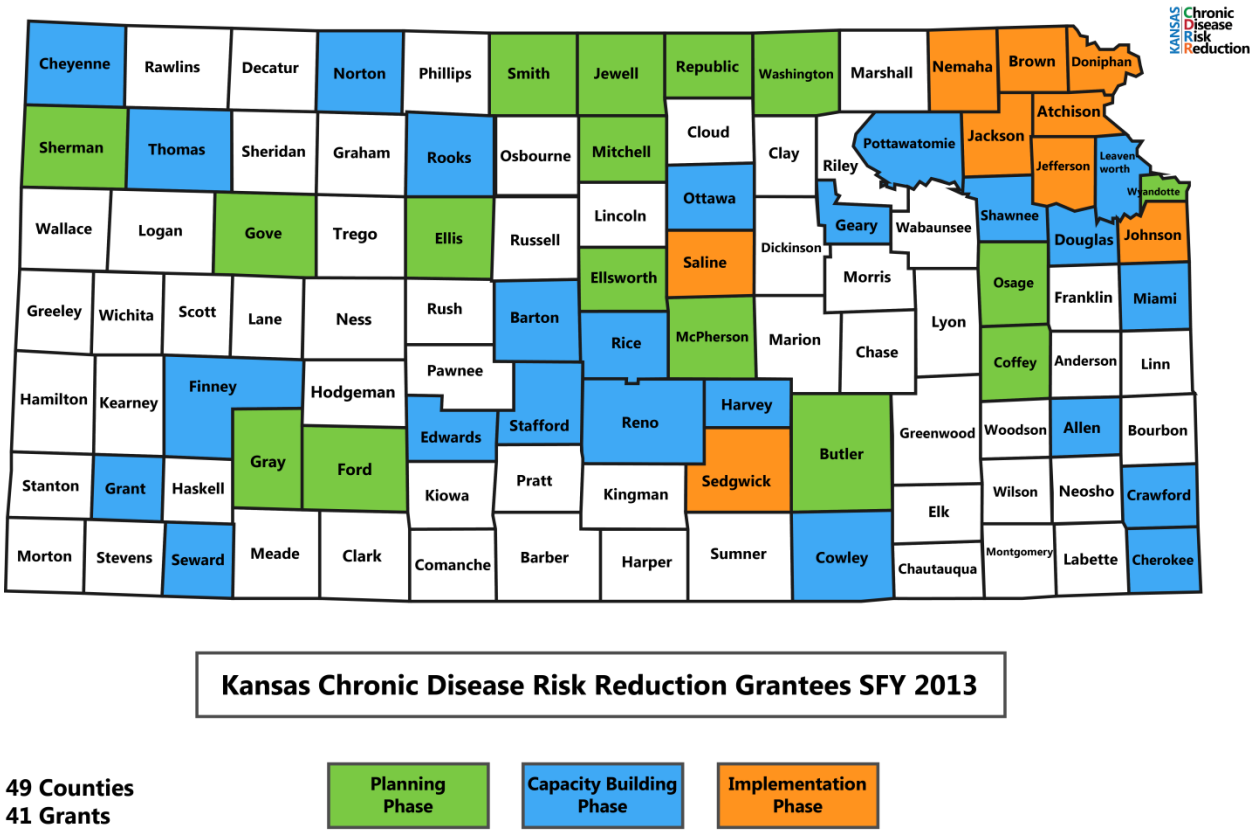
In state fiscal year 2013, the CDRR program funded 41 applications from local health departments and community-based organizations. While most grantees implement CDRR activities in a single county, some provide services within a multi-county area, extending coverage to 49 counties. Overall, CDRR grantees undertook a total of 136 community-based activities across Kansas. The scope and intensity of each activity is tailored to the size of the community and is dependent upon funding and the capacity of the grantee to complete proposed activities. Because of these differences, it is difficult to compare one grantee's activities to another.

It is also important to recognize there are social, environmental, economic and geographical factors unique to populations that may serve as potential facilitators or barriers to chronic disease prevention and control efforts. The burden of chronic disease is most successfully addressed in a coordinated manner involving community members from public and private agencies and organizations with expertise in clinical care, communications and community outreach.

Engaging a diverse group of community stakeholders for implementing strategies to reduce the burden of disease is essential as local partnerships enhance efforts, leverage community resources, and maximize reach and impact of activities. Local coalition members often represent schools, colleges, clinics, faith communities, law enforcement agencies, local health care systems, dentists, worksites and non-profit organizations. For example, the Central Kansas Foundation, a north central Kansas CDRR grantee, partnered with the Salina Family YMCA and Urban Water Brush Committee to expand a network of trails enabling the community to safely and efficiently walk or bike to all parts of the city. In addition, Barton County worked with a local food bank to provide their customers tobacco cessation education and referral information to the Kansas Tobacco Quitline.

CDRR is working with the Tobacco Free Kansas Coalition to provide complementary technical assistance via online and in person trainings to grantees to reduce duplication of services. Grantees work with organizations that share common goals such as developing smoke-free trails, tobacco-free schools, tobacco-free workplaces and multi-unit housing and linking health care providers to engage and empower people to maintain good health. For example the Sedgwick County Health Department garnered additional support and funding from the American Lung Association to pursue multi-unit smoke-free housing. Local insurance companies, apartment association, respiratory therapists, regional prevention center and fire department all partnered together to work on the initiative.

Figure 1. Map of CDRR Grantees in State Fiscal Year 2013



Kansas Chronic Disease Risk Reduction Grantees SFY 2013

49 Counties
41 Grants

Planning Phase | **Capacity Building Phase** | **Implementation Phase**

Application Process

CDRR grant applications are due mid-March and are carefully reviewed by internal staff and external experts invited to be guest reviewers. Reviewers are divided into small teams and assigned a group of applications. Each reviewer scores grants separately using a rubric developed by state staff and then meet with the group to discuss and reconcile notes and scores. Group scores are then presented by the group at an in-person meeting of all grant reviewers. During the in-person meeting each grant application is discussed in-depth. Outreach staff members with prior experience coordinating an applicant's grant are excluded from scoring the application, but are deferred to describe past performance of the grantee. The outputs of the review process are a ranked list of applications, strengths and weaknesses of each application, and a final funding recommendation: fund, fund with revisions or do not fund. The ranking, strengths and weaknesses, and funding recommendation are used by agency leadership to determine funding levels and facilitate revisions if funded.

Planning Grantees & the CHANGE Tool

The causes of chronic disease, like most public health priorities, arise from more than just individual actions and decisions. Social and environmental conditions are often the common thread to disease burden. No sector is capable of reducing that burden alone, and because health begins in homes and communities, it takes collaboration and a cross-cutting approach to make change.

During the planning phase, grantees form a functioning, cross-sector community coalition. Through their participation in CDRR, funded communities have increased their capacity to establish and collaborate with state and local partnerships aimed at reducing the risk factors that cause chronic disease. This coalition utilizes public-private and cross-sector partnerships extensively to be successful. Simultaneously, grantees engage the community in grantees' activities, such as during the completion of the Community Health And Group Evaluation (CHANGE) Tool, a tool developed by the Centers for Disease Control (CDC) to identify needs and assets in the areas of tobacco prevention, physical activity and nutrition. The CDRR program recommends and provides technical assistance to grantees completing the CHANGE Tool.[vi] The CHANGE Tool meets CDRR's community assessment needs by providing a community snapshot of policy, systems and environmental structures related to chronic disease and helps identify areas for improvement. During the CHANGE Process, the Bureau of Health Promotion's Healthy Communities Coordinator, works with each community individually to educate them on the CHANGE Tool's eight step process. This includes working with communities on identifying key members to participate in coalition building and providing technical assistance during the data collection and community action plan building process. Once the assessment is complete, communities develop a community action plan with short-term and long-term objectives related to decreasing the prevalence of chronic diseases in their community.

All Planning grantees are required to complete the CHANGE Tool. Grantees at more advanced phases are encouraged to complete the CHANGE Tool if their previous community assessment was conducted more than five years ago. Table 1 shows the progress of 42 grantees that have completed the CHANGE Tool.

Table 1. CHANGE Tool status and locations.

County/Region	Complete	In Progress
Allen	1	
Barton	1	
Cherokee	1	
Cheyenne	1	
Coffey	1	
Cowley	1	
Crawford	1	
Douglas	1	
Edwards	1	

Ellis	1	
Ellsworth	1	
Finney	1	
Geary	1	
Gove		1
Grant	1	
Gray/Ford	4	
Harvey	1	
Jewell	1	
Johnson	1	
Leavenworth	1	
McPherson	1	
Miami	1	
Mitchell	1	
Norton	1	
NEK	1	
Osage	1	
Ottawa	1	
Pottawatomie	1	
Reno	1	
Republic	1	
Rooks	1	
Saline	1	
Seward	1	
Shawnee	1	
Sherman	1	
Smith		1
Thomas	1	
Washington	1	
Wyandotte		1
Total	**39**	**3**

Kansas received national recognition for its part in testing and creating the CHANGE Tool. Additionally, the CHANGE Tool's integration in the CDRR structure was highlighted during CDC's Healthy Communities Program Strategic Alliance for Health Action Institute in 2011.

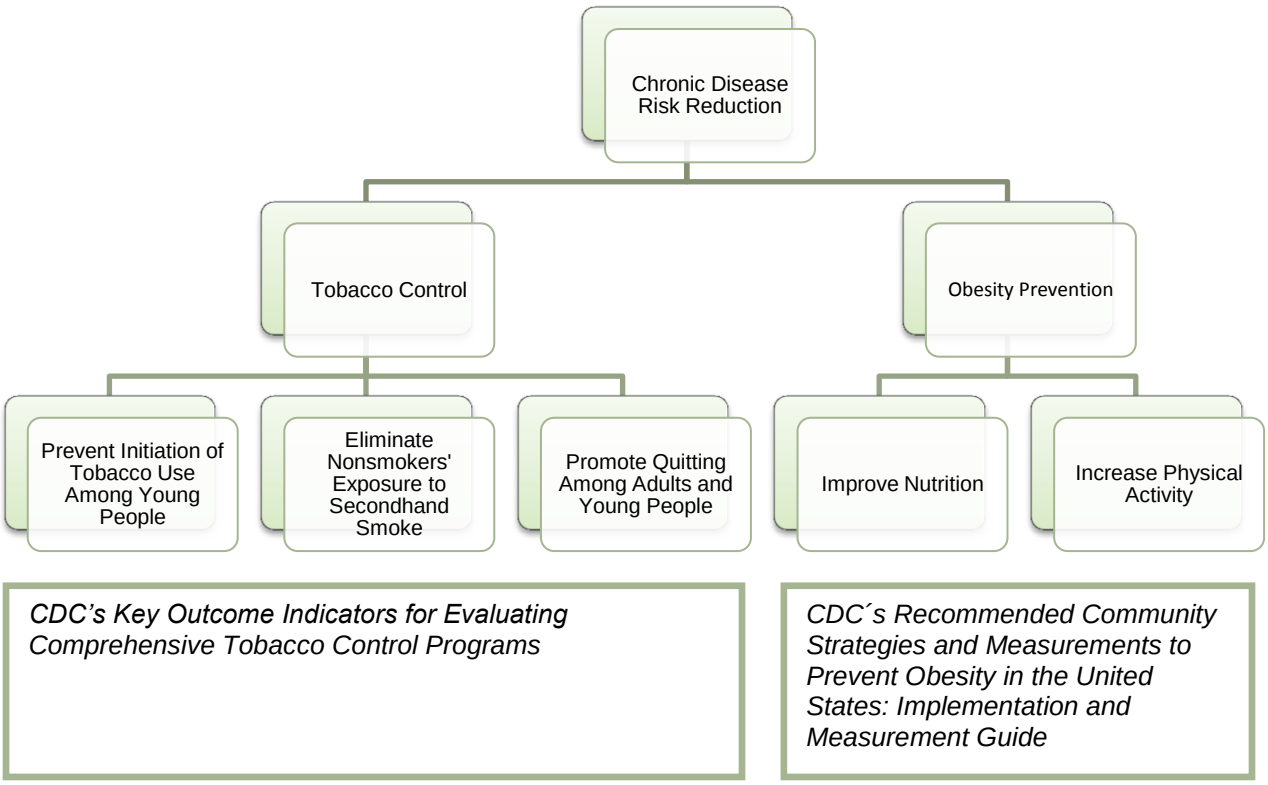
CHANGE TOOL IMPLEMENTATION

- Butler County successfully completed the CHANGE Tool in Augusta. The county health department plans to assist El Dorado in the CHANGE Tool process in SFY 2014. Strong community support with a well-rounded coalition, aided Republic County in completing the CHANGE tool at 47 community sites. Republic County was able to develop a comprehensive Community Action Plan that resulted in secured funding for new trails.

Capacity Building & Implementation Grantees

Grantees that have advanced beyond the Planning phase apply for funding to complete community-based primary prevention work in the areas of tobacco and obesity prevention. These areas are further broken down as shown in Figure 1. Grantees in the Capacity Building phase address one primary focus area in tobacco control, while Implementation grantees address all three areas in tobacco control. Obesity prevention activities are optional.

Figure 2. CDRR Programming Structure



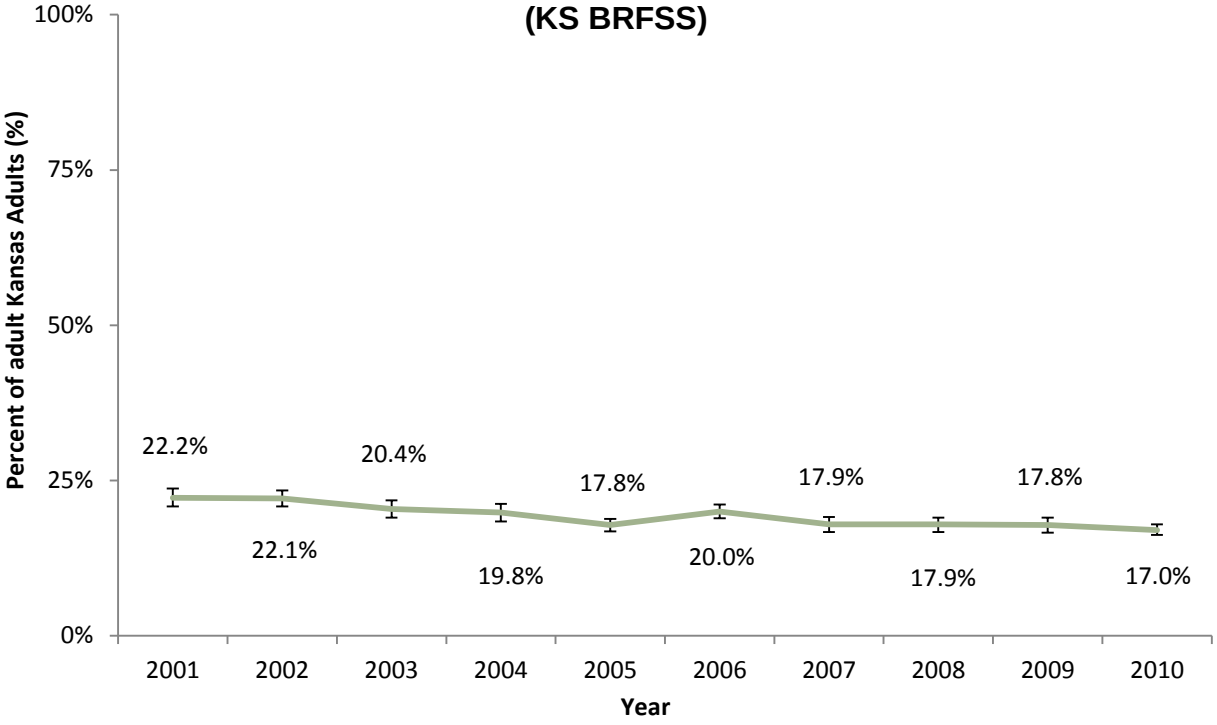
Tobacco Control Activities

In state fiscal year 2013, CDRR grantees undertook 69 evidence-based activities in the areas of tobacco prevention. Of these, 17 activities focused on preventing the initiation of tobacco use among young people, six activities focused on eliminating nonsmokers' exposure to secondhand smoke, and 46 activities focused on promoting quitting among adults and young people. Grantees rely on their public-private partnerships and engaging local entities, such as public and private schools, retailers, multi-unit housing owners, health care providers, city and county government, private non-profits and youth to successfully plan for and implement their

tobacco control activities. Often this has included engagement of non-traditional stakeholders, such as check-cashing, rent-to-own and pawn shops.

The prevalence of cigarette smoking among Kansas adults fell five percentage points between 2001 and 2010 (Figure 3).

Figure 3. Percent of adult Kansans who currently smoke cigarettes (KS BRFSS)

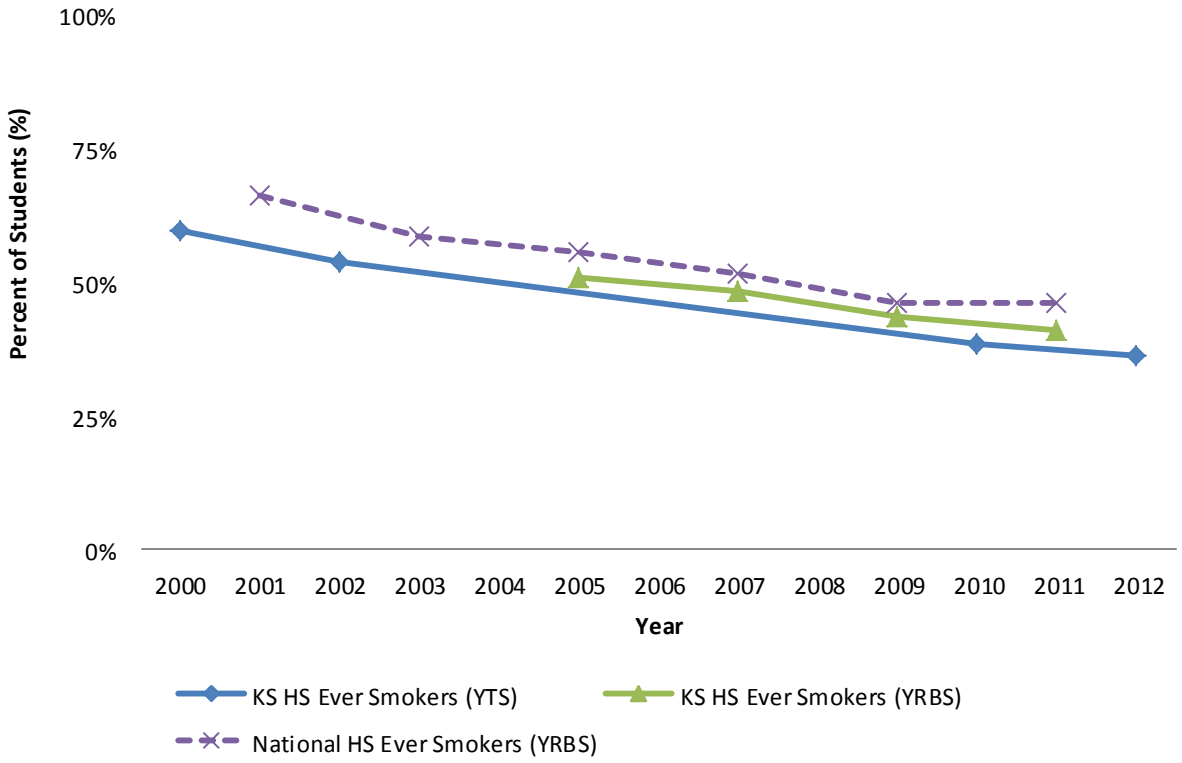


A major methodology change in 2011 prevents comparing 2011 BRFSS estimates to previous years; however, data from BRFSS indicated a significant reduction in adult smoking prevalence between 2011 and 2012, falling from 22 percent to 19.4 percent. This may indicate that the modest downward trend between 2001 and 2010, as demonstrated in Figure 3, continues.

Prevent Initiation of Tobacco Use Among Young People

The percent of Kansas high school students who have ever tried smoking cigarettes decreased by 40 percent between 2000 and 2012 (KS YTS), falling from 60.4 percent in 2000 to 36.4 percent in 2012. This section provides a brief overview of the types of community interventions CDRR grantees implement to contribute to reductions in youth cigarette smoking initiation. Figure 4 presents data from both the Kansas Youth Tobacco Survey and Youth Risk Behavior Survey. These school-based surveys use very similar sampling methods and make statewide data for youth tobacco use available every year.

Figure 4. Percent of Kansas and United States Youth Who Have Ever Tried Cigarette Smoking, 2000-2012



TOBACCO-FREE SCHOOL GROUNDS (TFSG) POLICIES:

CDRR grantees work with schools and school districts to implement TFSG policies at all schools. Emerging research suggests that school policies prohibiting tobacco use, when consistently enforced, are an essential part of lowering teen tobacco use. TFSG not only prohibit the use of tobacco on school grounds and at events, they also prohibit tobacco industry advertising, marketing or sponsorship, encourage tobacco cessation for students and staff, and prohibit students from exhibiting tobacco-related gear.

- Johnson County Department of Health and Environment worked with both public and private schools to support and construct a model policy for school districts. Johnson County met with school personnel over several months and provided a comprehensive tobacco-free school grounds toolkit for review that included model policies. When the coalition began work on this issue 1 of 9 private high schools, and 3 of 6 public school districts had comprehensive policies that included students, staff and visitors. At the close of SFY 2013, 7 of 9 private schools and 5 of 6 public school districts had adopted comprehensive policies. Youth at the schools and supporters presented the model policy to the school board.

RETAIL ASSESSMENT:

Exposure to tobacco marketing and other pro-tobacco messages increases the susceptibility of youth to experiment with tobacco. Although youth are exposed to tobacco marketing through a variety of avenues, the most prevalent one continues to be the retail environment. During the 2012 school year, 95 percent of high school students saw ads for tobacco products in stores and gas stations.[vii]

- The Center for Learning Tree Institute in Crawford County worked with youth and coalition members to count tobacco advertisements in the area. Updates were given once a quarter to the coalition on progress. The CDRR coordinator worked with youth and coalition members to perform an assessment twice during the year. After the initial assessment, a letter was sent to the retailers informing them of the role signage and placement plays in youth tobacco initiation. Within six months, there was a reduction in the number of visible tobacco advertisements.

Eliminate Nonsmokers' Exposure to Secondhand Smoke

With the passage of the statewide Kansas Indoor Clean Air Act (KICAA) in 2010, many grantees have played key roles in assisting their respective communities in implementing the new law to maximize the health benefits the law promotes. Smoke-free laws are important, because they reduce nonsmokers' exposure to secondhand smoke and encourage smokers to reduce their smoking and to quit. In 2011, it is estimated that 65,296 Kansas adults smokers were prompted to make a quit attempt and 12,433 former smokers were prompted to quit as a result of KICAA.[viii] When Kansans live in a largely smoke-free environment, it contributes to changes in the perception of what is normal or acceptable behavior. In addition research shows that children who have a parent who smokes are more likely to smoke and to be heavier smokers at young ages.[ixxxi] By maintaining a smoke-free home and environment, parents not only make smoking less convenient for their kids but also make a powerful statement that they believe smoking is undesirable. These changes in social norms contribute to a culture of tobacco-free living.

SMOKE-FREE HOUSING:

While KICAA reduces exposure to secondhand smoke in public places, many children and adults are still exposed to secondhand smoke in their apartments or condominiums. CDRR grantees provide technical assistance and support to multi-unit housing owners and administrators who wish to implement smoke-free policies. These policies reduce exposure to secondhand smoke and reduce property damage caused by smoking-related fires and staining.

- Tobacco Free Wichita Coalition's Smoke-free Housing Task Force created a smoke-free housing strategic plan. The plan includes strategies to educate apartment owners, managers and tenants on the benefits of adopting smoke-free policies and assisting with policy development, implementation and enforcement. Sedgwick County has seen increases in the number of multi-unit family dwellings with smoke-free policies because of this work. In 2012 three apartment

complexes in Wichita were smoke-free and increased to 12 smoke-free complexes in 2013.

SMOKE-FREE VEHICLES:

For reasons similar to smoke-free housing, organizations that operate vehicles may choose to prohibit smoking in vehicles.

- Johnson County Department of Health and Environment worked with city governments to implement tobacco-free vehicle policies in all city government entities within Johnson County.

SMOKE-FREE EVENTS:

Outdoor recreation events are not covered by KICAA. However, outdoor recreation events impact a large number of individuals who are gathered in one public place. Because events often target youth, there is interest in reducing the exposure to secondhand smoke and normalizing smoke-free rules elsewhere.

- Central Kansas Foundation in Saline County partnered with event planners to increase the smoke-free areas at the Smoky Hill River Festival. The benefit of smoke-free policies was presented to the director of the Salina Arts and Humanities Commission who then presented it to the entire commission that approved the policy. Central Kansas Foundation sought out additional support for signage and materials to identify and promote the smoke-free areas. More than three-fourths of the grounds are now smoke-free during the festival including all youth areas. The festival has more than 75,000 attendees each year. Central Kansas Foundation continues to meet with the Salina Arts and Humanities Commission as it works to make the Smoky Hill River Festival completely smoke-free.
- Edwards County worked to increase the number of outdoor facilities that are smoke-free by creating and implementing a policy for tobacco-free grandstands at the fairground. Edwards County community members presented the need for tobacco-free grandstands before the county commissioners. Commissioners agreed to pass a policy and provide signage effective January 22, 2013.

TOBACCO-FREE PARKS:

Similar to smoke-free events, tobacco-free parks reduce exposure of secondhand smoke and contribute to changes in social norms about the perceived acceptance of tobacco use.

- Thomas County worked to increase the number of public trails and recreation areas that have comprehensive tobacco-free policies. The Thomas County coalition developed and distributed a public perception survey about tobacco-free parks. Approximately 68 percent of respondents were in favor of a policy prohibiting tobacco use in all city parks. The information was presented to decision makers who implemented a policy to prohibit tobacco use in Poolside Park, which includes the park, trail and aquatic park.

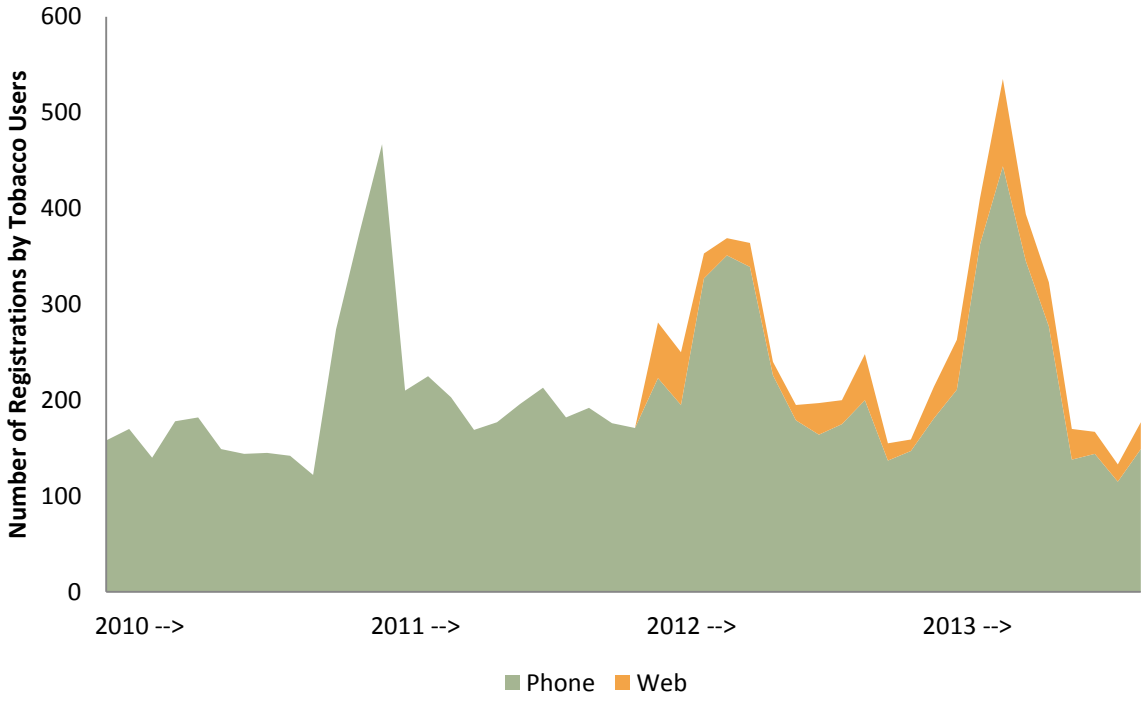
- Northeast Kansas Multi-County Health Department worked with Holton city leadership to increase the number of tobacco-free parks in Holton in response to a citizen's request. This process began when a parent discussed their concerns of smoking in ballpark stands and exposing children to tobacco to a member of the local health coalition. The coalition worked with city leadership to develop a policy that established four parks in Holton as tobacco-free.

Promote Quitting Among Adults and Young People

The Kansas Tobacco Quitline (1-800-QUIT-NOW or KsQuit.org) provides free one-on-one telephone or online cessation counseling to all Kansans and is promoted by grantees throughout the state. A recent review of the Kansas Tobacco Quitline estimated that Kansas saves about $9 for every $1 spent on the Kansas Tobacco Quitline. Not only is the Quitline a proven, cost-effective cessation strategy, for many people unfamiliar with policy, systems and environmental work, it is the face of tobacco use prevention in Kansas.

During SFY 2013 a total of 46 activities focused on promoting quitting among adults and young people. Many of these initiatives involved Kansas Tobacco Quitline promotion.

Figure 5. Kansas Tobacco Quitline Registrations, Phone and Web-Only, January 2010-October 2013



Quitline Referral Systems for Health Care Providers:

Kansas encourages health care providers use the "5 A's"[xii] (ask, advise, assess, assist and arrange) model to identify, counsel and refer tobacco users to the Quitline for in-

depth cessation counseling. In addition to facilitating 5 A's training, CDRR grantees championed a variety of systems-based strategies to institutionalize Quitline referral in health care organizations. These strategies include working with providers to ensure medical record flagging and protocols prompt discussion about tobacco use, and creating an account for the provider with the Quitline. The provider can refer patients directly to the Quitline. A Quitline counselor can then contact each patient directly to start cessation counseling. Callers that registered for counseling services receive five sessions and 10 sessions if the caller is pregnant. According to the Kansas birth certificate data, 14.5 percent of live births in 2011 were to women who smoked at any time during pregnancy.[xiii]

- The Learning Tree Institute of Crawford County was able to train staff from Via Christi Medical Center on cessation services and referrals to the Kansas Tobacco Quitline. Training was held for providers from both Cherokee and Crawford County. All Via Christi patient educators were trained on the 5A's quitline referral system and the Kansas Tobacco Quitline. Via Christi passed a policy designating that a patient educator meet with each patient who indicated they use tobacco and educate them on cessation options while in the hospital.
- Thrive Allen County facilitated the training of 22 health care providers in cessation services and Kansas Tobacco Quitline referral. Trainings were held twice during the grant year and a variety of health care professionals attended.
- Northeast Kansas Multi-County Health Department worked with Atchison Hospital to increase the number of fax referrals from physicians. Five cessation provider trainings were conducted about strategies to strengthen cessation interventions. The Respiratory Department of Atchison Hospital now utilizes the fax referral system for their patients.
- Rooks County worked with the two dental providers in the county to create a system in which patients identified as tobacco users could receive brief counseling and a referral to the Quitline.

QUITLINE PROMOTION FOR DISPARATE POPULATIONS:

Disparate populations are subpopulations that have a disproportionately higher prevalence of tobacco use than other subpopulations or the population as a whole. In Kansas, for instance, adults with lower annual household income, lower levels of education, poor mental or physical health, a disability, and/ or no health insurance have a higher prevalence of smoking than adults with higher annual household income, higher levels of education, better mental or physical health, living without a disability or have health insurance, respectively (Table 2).[xiv] As part of their capacity building requirements, CDRR grantees are required to integrate their tobacco prevention and control program goals with activities that address specific populations that are disproportionately affected by tobacco use, exposure to secondhand smoke, and associated disease, disability and death.

Table 2. Adult smoking prevalence among select Kansas subpopulations, BRFSS 2012

Current smoking status by annual household income	
Less than $15,000	**31.6%**
$15,000-$24,999	**27.6%**
$25,000-$34,999	**21.0%**
$35,000-$49,999	**19.8%**
$50,000+	**12.7%**
Current smoking status by level of education	
Some High School	**31.4%**
High School Diploma or GED	**24.5%**
Some college or technical school	**19.6%**
College graduate	**8.9%**
Current smoking status by mental health status	
14+ days of poor mental health in the past month	**37.8%**
<14 days of poor mental health in the past month	**17.3%**
Current smoking status by physical health status	
14+ days of poor physical health in the past month	**28.9%**
<14 days of poor physical health in the past month	**18.4%**
Current smoking status by health care coverage status	
Has health insurance	**16.5%**
No health insurance	**33.3%**

Below are examples of CDRR grantees working with disparate populations:

- Harvey County Health Department developed a low-income “blitz” that informed people with lower incomes of the Kansas Tobacco Quitline and cessation services. The health department partnered with check-cashing, rent-to-own, pawn shops, HUD public housing locations and the Kansas Department for Children and Families offices to distribute more than 1,600 Kansas Tobacco Quitline information pieces to customers.
- Lawrence-Douglas County Health Department worked on increasing cessation for pregnant and postnatal smokers. After the WIC program staff received 5A’s training, 56% of pregnant and postnatal smokers were assessed for their willingness to quit. After another program, Health Family Douglas County, received staff training in the 5A’s, a total of 100% of pregnant and postnatal smokers were assessed for their willingness to quit smoking.
- To increase the number of Johnson County uninsured and Medicaid insured callers to the Kansas Tobacco Quitline, the Quitline was promoted to the county’s 34 dental providers that providers services to that population. Nearly 25 percent of the providers established a system for referral to the Quitline. Their efforts

contributed to 105 callers to the Quitline from Johnson County that were either uninsured or receiving Medicaid.

- Sedgwick County Health Department worked to increase the number of lesbian, gay, bi-sexual and transgender (LGBT) smokers that contacted the Quitline. The health department is currently developing a new training for health care providers that will address specific concerns of the LGBT population when promoting cessation. Nineteen health care providers have agreed to incorporate cessation resources in their health care setting. According to the 2012-2013 Kansas Adult Tobacco Survey, the prevalence of smoking in the LGBT population is 33.1 percent, which is significantly higher than the prevalence of smoking in the heterosexual/straight population (17.4%).
- Barton County collaborated with local food banks to increase the number of low-income Quitline callers from three to 16 through referrals and educational materials.

WARM TRANSFER REFERRAL:

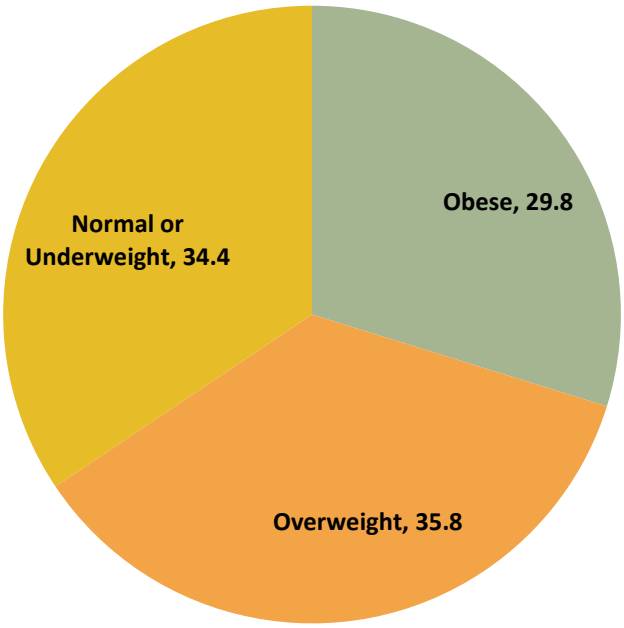
A traditional Quitline referral is sent to the Quitline by fax and a Quitline representative attempts to contact the patient at a later time by phone. In contrast, a "warm transfer" referral involves the health care provider calling the Quitline with the patient in the room, introducing the patient and physically handing the "warm" telephone to the patient to begin counseling. This strategy is currently being evaluated by Kansas University Medical Center researchers and is particularly promising in the hospital setting, where patients are usually required to abstain from tobacco and, if needed, are placed on nicotine replacement therapy as part of their stay.

- Ottawa County Health Department worked with the local hospital to refer patients to the Kansas Tobacco Quitline before they were dismissed from the hospital. Hospital staff was trained to implement warm transfers for patients who smoke prior to releasing them.

Obesity Prevention Activities

In addition to tobacco use prevention work, many CDRR grantees conduct activities to increase physical activity and improve nutrition in their counties. The goal of this work is to reduce the prevalance of overweight and obesity, thus decreasing the risk of many chronic diseases. As with grantees' tobacco control activities, grantees extensively utilized public-private and cross-sector partnerships and engaged the community in their efforts to increase physical activity and improve nutrition. Grantees have engaged multiple local entities, such as large private employers, city and county government, schools, and community members to plan and implement physical activity and nutrition interventions.

Figure 6. Weight Status of Kansas Adults, BRFSS 2012



According to the 2012 Kansas Behavioral Risk Factor Surveillance System, approximately 2 in 3 Kansas adults are overweight or obese (Figure 6). The factors contributing to overweight and obesity are complex, but are generally attributed to poor diet and lack of physical activity as a result of living in an environment that promotes calorie-dense foods and a sedentary lifestyle and has poor access to fruits and vegetables. In state fiscal year 2013, CDRR grantees implemented 45 activities in the area of obesity prevention. Of these, 24 activities focused on improving nutrition and 21 activities focused on increasing physical activity.

Improve Nutrition

Skyrocketing rates of obesity during the past three decades indicate the need for a new approach to obesity prevention. Although taking personal responsibility for your own diet may lead to improved nutrition and weight loss with constant vigilance, relying on that strategy has led to failure for the population as a whole. Forty-one percent of Kansas adults eat fruit less than one time per day and 22 percent eat vegetables less than one time per day.[xv] To account for our changing food environment, new strategies must be implemented to improve access to healthy foods. CDRR grantees pursue these strategies in a variety of community sectors.

BUSINESS CASE FOR BREASTFEEDING / LACTATION AREAS AT WORKSITES:

Breastfeeding is associated with many health benefits in infancy and later in life, including decreased risks for infections of the respiratory and gastrointestinal tracts[xvi] [xvii], allergies[xviii], sudden infant death syndrome (SIDS)[xix], and adolescent and adult obesity[xx] [xxi]. The American Academy of Pediatrics recommends exclusive breastfeeding for the first six months of a baby's life, followed by breastfeeding in combination with complementary foods until the baby is at least 12 months old.[xxii] Breastfeeding is often not supported in the workplace. By creating a private, clean space for the breastfeeding mother to express milk and instituting procedures that encourage the mother to express milk, businesses create healthier children and families. There is also a positive return on investment after accounting for reduced workforce turnover, health care savings, higher productivity and employee loyalty, and positive public relations[xxiiixxivxxvxxvi]. According to CDC's 2013 Breastfeeding Report Card, the percent of children in the U.S. who were ever breastfed was 76.5 percent and the percent still breastfeeding at 6 months old was 49 percent. Kansas has notably lower percentages: 72.9 percent of Kansas children have ever been breastfed and only 41.8 percent continued to be breastfed at 6 months old.

- Cowley County Health Department worked with five area employers to implement policies for promoting breastfeeding at work. One area employer, General Electric, established a breastfeeding policy and two lactation rooms. General Electric's efforts were recognized by the coalition through the local chamber of commerce, a news release and a highlight at a county-wide baby shower.
- Barton County was able to increase the lactation areas in the courthouse for employee and visitor use. A collaboration with the Kansas Breastfeeding Coalition, KDHE Nutrition Coordinator and Central Kansas Partnership was formed to provide trainings to area businesses. A breastfeeding policy was passed for all three courthouses and lactation rooms have been established in two of the courthouses.

COMMUNITY GARDENS:

Community gardens are patches of land set aside for residents to plant, maintain and harvest a garden. Not only does the healthy produce from the gardens feed the community, but members also get regular exercise by working the garden. CDRR grantees help coordinate the process to establish community gardens across the state.

- The nearest grocery store to the Iowa Tribe reservation in Brown County is 18 miles away. The tribal council recognized the need for the reservation's 450 residents to have better access to fresh fruits and vegetables. Northeast Kansas Multi-County Health Department provided CDRR funding and technical assistance for a community garden to be planted on a three-acre on the reservation. Within the year, 12 types of traditional vegetables, three types of fruit trees and 30 berry bushes were planted. Native white corn that was grown on the reservation in previous generations was brought back to the land and planted in the new community garden. Besides access to food and nutrition, the garden has

provided opportunities for inter-generational conversations and gardening lessons to be passed from tribal elders to youth.

- Cowley County Health Department worked on establishing a neighborhood garden for a low-income housing facility. Four raised bed were built just outside the building's west entrance. Tenant gardeners filled the beds with tomato and pepper plants, lettuce, radishes and other vegetables. Use policies ensure residents are responsible for the garden and improve the sustainability of the garden.
- The Thomas County Coalition established a community garden in Colby. Even though it was a dry season, community members harvested more than 300 pounds of produce. The coalition determined that 235 people directly benefited from the garden. Twenty-eight volunteers (adults and youth) worked 180 hours in the garden. Thomas County residents that use the Genesis Food Bank received fresh fruits and vegetables donated from the community garden.
- Access to fruits and vegetables was increased in Cheyenne County for its population of 2,726. The Cheyenne County Community Garden in St. Francis provided approximately 1,209 pounds of fresh fruit and vegetables for approximately 20 volunteers, 12 junior garden club members, 35 monthly food pantry recipients, and 24 elder care facility residents.

HEALTHY VENDING:

Activities in this area improve the availability and appeal of healthier vending machine options for worksite employees by changing the vending environment.

- Shawnee County Health Agency recently began working to make a percentage of choices in their vending machines low in sodium. After completing the CDC's CHANGE Tool, the agency found that even though the vending machines had some healthier options, there was no policy to ensure a certain level of access to healthy foods. As a result, the employee wellness committee drafted a healthy vending policy that requires 40 percent of the items in vending machines be Fit Picks. The Fit Pick™ program helps consumers locate vending machine choices that support a healthy lifestyle. Stickers placed on Fit Pick items in the machine identify products that meet nutrition guidelines based on recommendations from the American Heart Association, 2005 USDA Guidelines for Americans and Alliance for a Healthier Generation. Shawnee County Health Agency vending machines are covered by this policy.
- Harvey County Health Department worked with three employers in the county to assess worksite vending options and improve access to healthy foods by increasing the quantity of healthy vending options available to employees. The County Courthouse replaced half of the snacks in the vending machine with healthier food choices.
- Pottawatomie County Health Department worked to increase the healthy food options in vending machines within county buildings. They exceeded their goal by increasing healthy food options in the vending machines from 10 percent to 33

percent. Four of the healthy food options were among the top 10 items sold during the grant period.

NUTRITION ENVIRONMENT MEASURES SURVEY RESTAURANT ASSESSMENT (NEMS-R):

Similar to promoting the use of the CHANGE Tool, CDRR supports the implementation of validated public health assessments that lead directly to action. The NEMS-R is a nationally recognized assessment of the restaurant environment developed by researchers at the University of Pennsylvania.[xxvii] A certified NEMS trainer provided instruction to Lawrence-Douglas County Health Department staff to use the NEMS-R.

- Lawrence-Douglas County Health Department administered the NEMS-R in 38 restaurants. Results of the assessment are being used to create criteria for a LiveWell Lawrence program that will recognize healthy restaurants in Douglas County. The results are also being used to tailor technical assistance for restaurants that received low scores to improve the nutritional content and marketing of nutritional foods.

HEALTHIER SCHOOL FUNDRAISERS:

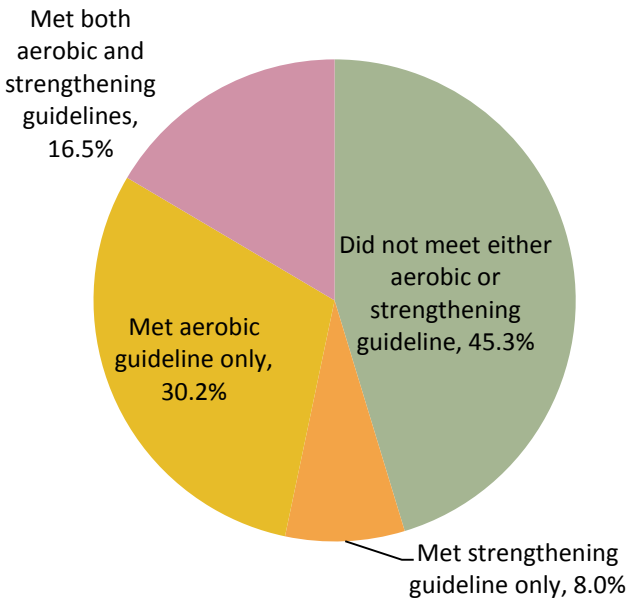
It has been a tradition in public schools to sell unhealthy foods to raise money for school trips, equipment or other school special programs or supplies. To promote a healthier lifestyle to the community and to encourage the support of such activities, schools are turning to healthy fund-raising.

- Reno County Health Department's assessment of current fundraising policies in schools resulted in a partnership with Nickerson Grade School to hold a "Food Revolution Day" that promoted healthy eating and active living. Champions within the Nickerson school district were recruited to help sustain a healthy eating and active living environment. The school is involved with a community agricultural site that will grow a garden to be used to raise money and grow produce for the school district.

Increase Physical Activity

Statewide in 2011, only 16.5 percent of Kansas adults 18 years old and older met physical activity guidelines. (Figure 7).

Figure 7. Prevalence of meeting physical activity guidelines among adults 18 years and older, Kansas BRFSS 2011



There are a variety of causes that lead to a sedentary lifestyle, but the most salient and reversible reason for lack of physical activity is that the environment does not encourage it. While most interventions focus on policy and systems changes, increasing physical activity is one area where grantees can target the environment itself.

SAFE ROUTES TO SCHOOL AND WALKING SCHOOL BUS:

Safe Routes to School is a national program that examines the conditions for walking and biking to and from schools. Walking School Bus is a program that recruits volunteers to walk students in a group to and from school. Walking school busses provide safety for children, encourages walking and helps them achieve the recommended 60 minutes of physical activity a day. The Centers for Disease Control and Prevention (CDC) reports 80.9 percent of 9th through 12th grade girls and 62.9 percent of 9th through 12th grade boys in Kansas did not get the recommended 60 minutes of physical activity per day in 2013.

- Miami County Health Department worked with local agencies to establish a Safe Kids Coalition and develop a Walking School Bus plan after two local children were struck by vehicles resulting in one death. Miami County Health Department met with area agencies approximately once a month to establish the Safe Kids Coalition and to work on the Walking School Bus plan. The establishment of the

coalition has resulted in a group of individuals that is now dedicated to working on promoting safety in Miami County.

TRAILS:

Trails are not only attractive and a good place to exercise, but also serve the practical need of connecting different parts of a community. These inter-community connections promote active transportation, such as walking and biking.

- The Ottawa County Health Planning Commission (OCHPC) met with city officials to describe how the community would benefit from a trail. OCHPC gained support and approval from city officials to establish a trail that provides a safe connection from downtown Minneapolis to Markley Grove Park. The trail was completed after securing additional funding from Sunflower Foundation that covered construction costs. OCHPC is in the process of designating the trail smoke free.

COMPLETE STREETS:

In population centers, some grantees have elected to pursue the Centers for Disease Control and Prevention recommended Complete Streets policies in partnership with city and county officials[xxviii]. A Complete Streets policy ensures that transportation planners and engineers consistently design and operate the entire roadway with all users in mind including bicyclists, public transportation vehicles and riders, individuals with disabilities, and pedestrians of all ages.

- Thrive Allen County worked with the city of Iola to obtain six new curb-cuts and nine bright yellow cross walk signs for pedestrians around the downtown area. Iola has the largest town square in the entire U.S. These new curb-cuts and signs completed work that had begun a few years ago to make the town square complete. This allows for easier walking conditions for everyone including people with disabilities.

Conclusion

Forty-one Chronic Disease Risk Reduction (CDRR) grants were administered in SFY13. These 41 CDRR grantees undertook 69 evidence-based or promising activities in the areas of tobacco prevention, 18 of which are highlighted in this document. In the area of obesity prevention grantees undertook 46 activities of which 14 activities are highlighted. CDRR grantees were comprised of local health departments and community-based organizations that fell into three program phases: four implementation grants, 22 capacity grants and 15 planning grants. These grants were awarded to organizations that serve approximately 80 percent of the state's population. Grant activities relied heavily on dozens of public-private and cross-sector partnerships along with extensive community engagement to be successful. Planning grantees concentrated on assessing the community's needs and building a health coalition. Capacity and implementation grantees executed their community action plans to facilitate targeted policy, systems and environmental changes. Program staff

documented and facilitated grantees' progress through site visits, trainings and reporting.

State staff supported these grants with a variety of evaluation and communications capacity building strategies. These included filling 40 data requests, 240 instances of one-on-one program evaluation technical assistance, 82 instances of one-on-one communications technical assistance, more than 130 instances of communications collaboration, six webinars on programming opportunities and one statewide summit. This extensive technical assistance is made possible by the presence of regional grant coordinators who facilitate grantee work in their region and connect them with state and local resources.

In addition to a significant amount of local leveraged funding from communities matching CDRR funds, CDRR is funded with a combination of state funding and federal grant money. This diverse funding portfolio improves the sustainability of the program and serves as a model for grantees, many of whom have been able to use their CDRR work as a basis for securing additional state and national grants to expand their chronic disease prevention work.

Challenges and Lessons Learned

The stories listed here suggest that achieving health improvements across a community is difficult, yet achievable. Known barriers include limited capacity for local data collection, which is deceptively costly and labor intensive, and uncertainty of annual funding when trying to accomplish work that should take multiple years. A consequence of these issues is that activities are sometimes limited in scope and insufficient staff time is devoted to chronic disease prevention. This, of course, makes it difficult to produce sustainable impact across a community. CDRR is in the process of revising programming requirements and reporting options to alleviate some of these problems. Most partners and stakeholders already have a variety of reporting requirements and it can be difficult to meet collection demands. The program is enhancing its data collection system to use Catalyst, an online project management system. Catalyst is projected to be launched in early 2015 and will improve the quality of reported information while reducing reporting burden.

Community collaborations are difficult to develop and sustain. Community coalitions subsist on the volunteered time and effort of community members and, increasingly, must contend with competing agendas and priorities. CDRR offers webinars and in-person training throughout the year to help grant recipients contend with these challenges. Future training opportunities will continue to be based on meeting the stated needs of grantees and providing the wide range of skills essential to promoting community health.

Discussion

The staggering cost and prevalence of chronic disease across the country leaves little room for debate about the need for strategies that reduce the underlying causes of chronic disease: tobacco use, physical inactivity and unhealthy eating. CDRR

community grants have supported the development of public health practitioners skilled in facilitating community action for reducing these primary risk factors, but must continue to adapt to a changing landscape.

The tobacco industry is rapidly adapting to the acceptance of smoke-free laws and rules. Tobacco products are no longer limited to the traditional cigarettes and chewing tobacco. New dissolvable tobacco products continue to be test marketed in Kansas and electronic cigarettes (e-cigarettes) have been promoted. Dissolvable tobacco products come in small shapes and sizes that mimic common products like gum, candy and flavor-dipped toothpicks. Young people are a prime target for tobacco marketing and advertising. The locations where tobacco products are sold can have an impact on tobacco use by young people. For example, more cigarettes are sold in convenience stores than in any other type of store, and 70 percent of adolescents shop in convenience stores at least once a week where they are more likely to be exposed to prosmoking messages.[xxix] Work continues at the state level to educate the public about the changing face of tobacco use, but one of our best tools to address tobacco use lies in efforts at the community level. CDRR grantees and the health coalitions they partner with work tirelessly to educate their communities about tobacco use in all forms and to promote the free cessation services offered by KDHE.

The escalating obesity epidemic of the past three decades has been the focus of much attention from the public and policymakers. With 2 of 3 Kansas adults and more than 1 of 4 Kansas high school students overweight or obese, obesity is competing with tobacco use to become the leading preventable cause of death. Though the science for slowing and reducing obesity at the population level is still developing, CDRR grantees have embraced interventions with the strongest evidence base and engaged whole communities in these efforts.

State Leadership

To address these issues at the state level, the Kansas Department of Health and Environment continues to provide support and technical assistance to CDRR grantees as they build community support, evaluation capacity and refine communications. Each year the CDRR reporting process is reviewed and revised to continuously improve the ability of both local grantees and state staff to demonstrate program impact and guide the continued chronic disease risk reduction investment. The highlights report is posted online for public access and shared with Chronic Disease Risk Reduction grantees, program funders, state leadership and partners including the Tobacco Free Kansas Coalition. While a sustained and effective statewide chronic disease risk reduction program is the goal, the true strength of the CDRR model lies within each community. Communities representing the vast majority of the state population have vibrant, healthy coalitions that rely on technical support and funding from KDHE. This state-local partnership enables a statewide approach for continued response and impact on problems identified in their respective communities, and offers a critical statewide resource to reduce and prevent chronic disease throughout Kansas.

Appendix

CDRR Population Outcomes

Data sources:

- YRBS: Youth Risk Behavior Survey, a school-based survey conducted every two years.
- YTS: Youth Tobacco Survey, a school-based survey conducted every two years.
- BRFSS: Behavioral Risk Factor Surveillance System, a telephone-based survey of Kansas adults conducted annually.
- KTQL: Kansas Tobacco Quitline utilization data, collected monthly.

Youth, School-Based Measures

School Year Data Source	2004-2005 YRBS	2005-2006 YTS	2006-2007 YRBS	2007-2008 YTS	2008-2009 YRBS	2009-2010 YTS	2010-2011 YRBS	2011-2012 YTS	2012-2013 YRBS	2013-2014 YTS
Percent of high school students that currently smoke cigarettes	21.0%	NA	20.6%	NA	16.9%	17.1%	14.4%	13.0%	10.2%	NA
Percent of male high school students that currently use smokeless tobacco	17.4%	NA	16.0%	NA	13.6%	15.5%	14.1%	11.1%	13.2%	NA
Percent of high school students that have ever tried smoking cigarettes	51.0%	NA	48.6%	NA	43.7%	38.7%	41.3%	36.4%	39.3%	NA
Percent of high school students that were exposed to secondhand smoke at home or in a vehicle in the past week*	NA	NA	NA	NA	NA	55.6% (room or car)	NA	38.2% (vehicle or home)	NA	NA
Percent of high school student cigarette smokers that tried to quit smoking in the past year	54.6%	NA	51.7%	NA	51.1%	41.4%	52.1%	58.5%	50.4%	NA
Percent of high school students that are obese	11.8%	NA	11.0%	NA	12.2%	11.2%	10.2%	11.8%	12.6%	NA
Percent of high school students that consumed fruits and vegetables five or more times per day in the past week	20.6%	NA	20.8%	NA	20.5%	21.0%	17.0%	22.5%	16.4%	NA
Ate fruit or drank 100% fruit juice one or more times per day during the past seven days	62.0%	NA	59.4%	NA	61.7%	60.1%	59.6%	62.4%	59.5%	NA
Ate vegetables one or more times per day during the past seven days	66.8%	NA	67.2%	NA	64.0%	59.0%	64.3%	67.9%	63.4%	NA
Percent of high school students that participated in physical activity for at least 60 minutes per day in the past week	20.4%	NA	26.3%	NA	27.8%	NA	30.2%	31.7%	28.3%	NA

“NA” means not available.

Adult Measures

Calendar Year Data Source	2005 BRFSS	2006 BRFSS	2007 BRFSS	2008 BRFSS	2009 BRFSS	2010 BRFSS	2011 BRFSS*	2012 BRFSS*	2013 BRFSS*	2014 BRFSS*
Percent of adults that currently smoke cigarettes	17.8%	20.0%	17.9%	17.9%	17.8%	17.0%	22.0%	19.4%	20.0%	pending
Percent of adult males that currently use smokeless tobacco	NA	NA	NA	9.4%	10.8%	9.8%	10.1%	10.7%	pending	pending
Percent of adult smokers that tried to quit smoking in the last year	45.7%	NA	NA	53.9%	53.9%	56.8%	55.5%	57.0%	pending	pending
Percent of adults that are obese	23.9%	25.9%	27.7%	28.1%	28.8%	30.1%	29.6%	29.8%	pending	pending
Percent of adults that met aerobic and strengthening physical activity guidelines	NA	NA	NA	NA	NA	NA	16.5%	NA	pending	pending
Percent of adults who ate fruit less than one time per day	NA	NA	NA	NA	NA	NA	41.4%	NA	pending	pending
Percent of adults who ate vegetables less than one time per day	NA	NA	NA	NA	NA	NA	22.3%	NA	pending	pending

*In 2011 the BRFSS methodology changed. Measures from 2011 and after should not be compared to measures from 2010 and earlier because the data were collected differently.

"NA" means not available.

Calendar Year Data Source	2005 KTQL	2006 KTQL	2007 KTQL	2008 KTQL	2009 KTQL	2010 KTQL	2011 KTQL	2012 KTQL	2013 KTQL	2014 KTQL
Average number of monthly Quitline registrations	NA	NA	NA	NA	NA	181	215	251	257	pending

"NA" means not available.

[i] U.S. Preventive Medicine, Inc. National Situation. U.S. Preventive Medicine website. 2011. Available at: http://uspreventivemedicine.com/Prevention-Movement/National-Situation.aspx. Accessed March 28, 2014.

[ii] Kung HC, Hoyert DL, Xu JQ, Murphy SL. Deaths: final data for 2005. *National Vital Statistics Reports.* 2008;56(10). Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_10.pdf. Accessed September 3, 2014.

[iii] Anderson G. *Chronic conditions: making the case for ongoing care*. Baltimore, MD: John Hopkins University; 2004.

[iv] Kansas Department of Health and Environment. *Kansas Chronic Disease State Plan 2013-2017*. Available at: http://www.kdheks.gov/bhp/download/CD_State_Plan_2014_Reduced.pdf. Accessed July 8, 2014.

[v] Loeb AL, Ernster VL, Warner KE, Abbotts J, & Laszlo J. Smoking and lung cancer: an overview. *Cancer Research*. 1984; 44: 5940-5958.

[vi] Centers for Disease Control and Prevention. Community Health Assessment aNd Group Evaluation (CHANGE): Building a Foundation of Knowledge to Prioritize Community Needs. Centers for Disease Control and Prevention's Healthy Communities website. 2013. Available at: http://www.cdc.gov/healthycommunitiesprogram/tools/change.htm. Accessed March 31, 2014.

[vii] 2011/2012 Kansas Youth Tobacco Survey. Kansas Department of Health and Environment, Bureau of Health Promotion.

[viii] Kansas Department of Health and Environment. Tobacco and Kansas Adults. Available at: http://www.kdheks.gov/brfss/PDF/2011_BRFSS_Kansas_Tobacco.pdf. Accessed September 8, 2014.

[ix] Gilman, SE, et al., "Parental Smoking and Adolescent Smoking Initiation: An Intergenerational Perspective on Tobacco Control," Pediatrics 123(2): e274-e281, February 2009.

[x] Bauman, K, et al., "Effect of parental smoking classification on the association between parental and How Parents Can Protect Their Kids From Becoming Addicted Smokers / 4 adolescent smoking," Addictive Behaviors 15(5):413-22, 1990.

[xi] Osler, M, et al., "Maternal smoking during childhood and increased risk of smoking in young adulthood," International Journal of Epidemiology 24(4):710-4, August 1995.

[xii] Agency for Healthcare Research and Quality. Five Major Steps to Intervention (The "5 A's"). Agency for Healthcare Research and Quality website. December 2012. Agency for Healthcare Research and Quality, Rockville, MD. http://www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/tobacco/5steps.html

[xiii] Kansas Department of Health and Environment. The Kansas Annual Summary of Vital Statistics. KDHE website. 2014. Available at http://www.kdheks.gov/hci/annsumm.html. Accessed September 3, 2014.

[xiv] 2012 Kansas BRFSS. Kansas Department of Health and Environment, Bureau of Health Promotion.

[xv] Kansas Department of Health and Environment. Bureau of Health Promotion. Obesity, Physical Activity and Nutrition in Kansas. KDHE website. Available at http://www.kdheks.gov/brfss/PDF/2013_Kansas_Obesity_Burden_Document.pdf. 2013. Accessed March 31, 2014.

[xvi] Duijts, L., Jaddoe, V. W., Hofman, A., & Moll, H. A. (2010). Prolonged and exclusive breastfeeding reduces the risk of infectious diseases in infancy. Pediatrics, 126(1), e18-e25.

[xvii] Lawrence, R. A. (1997). A review of the medical benefits and contraindications to breastfeeding in the United States. National Center for Education in Maternal and Child Health.

[xviii] Lawrence, R. A. (1997). A review of the medical benefits and contraindications to breastfeeding in the United States. National Center for Education in Maternal and Child Health.

[xix] Hauck, F. R., Thompson, J. M., Tanabe, K. O., Moon, R. Y., & Vennemann, M. M. (2011). Breastfeeding and reduced risk of sudden infant death syndrome: a meta-analysis. Pediatrics, 128(1), 103-110.

[xx] Arenz, S., Rückerl, R., Koletzko, B., & von Kries, R. (2004). Breast-feeding and childhood obesity—a systematic review. International journal of obesity, 28(10), 1247-1256.

[xxi] Fergusson, D. M., McLeod, G. F., & Horwood, L. J. (2014). Breast Feeding, Infant Growth, and Body Mass Index at 30 and 35 Years. Paediatric and perinatal epidemiology, 28(6), 545-552.

[xxii] American Academy of Pediatrics. "Breastfeeding and the use of human milk," Pediatrics 129(3): e827 – e841, February 2012.

[xxiii] Centers for Disease Control and Prevention. The CDC Guide to Strategies to Support Breastfeeding Mothers and Babies. Atlanta: U.S. Department of Health and Human Services; 2013.

[xxiv] Cohen R, Mrtek MB. The impact of two corporate lactation programs on the incidence and duration of breast-feeding by employed mothers. Am J Health Promot.1994;8(6):436-441.

[xxv] Balkam JA, Cadwell K, Fein S. Effect of components of a workplace lactation program on breastfeeding duration among employees of a public-sector employer. Matern Child Health J. 2011; 15(5):677- 683.

[xxvi] Bar-Yam NB. Workplace Lactation Support, Part II: Working with the Workplace. J Hum Lact. 1998; 14(4):321-325.

[xxvii] Saelens, B.E., Glanz, K., Sallis J.F., Frank L.D. Nutrition Environment Measures Study in Restaurants (NEMS-R): Development and evaluation. *American Journal of Preventive Medicine*. 2007; 32(4):282-289.

[xxviii] National Complete Streets Coalition. Smart Growth America Web site. Available at http://www.smartgrowthamerica.org/complete-streets. Accessed March 31, 2014.

[xxix] U.S. Department of Health and Human Services. *Preventing Tobacco Use Among Youth and Young Adults: A Report to the Surgeon General.* Rockville, MD: U.S. Department of Health and Human Services; 2013.